

**EPA Superfund
Record of Decision:**

**WITCO CHEMICAL CORP. (OAKLAND PLANT)
EPA ID: NJD045653854
OU 01
OAKLAND, NJ
09/28/1992**

ROD FACT SHEET

SITE

Site name: Witco Chemical Corporation

Site location: Oakland, Bergen County, New Jersey

HRS score: 33.12

ROD

Date Signed: September 28, 1992

Selected remedy: No Action

Capital cost: None

O & M cost: \$10,000 (5 year monitoring @ \$2,000/year)

Present-worth cost: \$8,660

LEAD

Environmental Protection Agency

Primary Contact: John Osolin, (212) 264-9301

Secondary Contact: Janet Feldstein, (212) 264-0613

Main PRPs: Witco Chemical Corporation

WASTE

Waste type: Volatile Organics

Waste origin: Laboratory Seepage Pits

Estimated waste quantity: Unknown (Relatively Small)

Contaminated medium: Soil and Groundwater

SEP 17 1992

Record of Decision for the Witco Chemical Corporation Site

Kathleen C. Callahan, Director
Emergency and Remedial Response Division

Constantine Sidamon-Eristoff
Regional Administrator

Attached for your approval is the Record of Decision (ROD) for the Witco Chemical Corporation site, located in Oakland, Bergen County, New Jersey. The selected remedy calls for No Further Action, with a limited offsite monitoring program. Witco removed contaminated soils and sludges in 1987 and 1988. That action appears to have fully addressed the principal threats posed by the Site.

The remedial investigation report and the Proposed Plan were released to the public for comment on June 28, 1992. A public comment period on these documents was held from June 28, 1992 through July 28, 1992. In addition, a public meeting to discuss these documents and the preferred No Action remedy was held on July 14, 1992. Comments received during the public comment period generally supported the No Action decision; however, there were several residents who expressed a desire for the Agency to conduct further monitoring. The comments are addressed in the attached Responsiveness Summary.

The ROD has been reviewed by the State of New Jersey Department of Environmental Protection and Energy (NJDEPE), and the appropriate program offices within Region II. Their input and comments are reflected in this document. NJDEPE has concurred with the selected remedy for the Witco Chemical Corporation site, as indicated in the attached letter.

If you have questions or comments on this document, I would be happy to discuss them with you at your convenience.

Attachments

DECLARATION STATEMENT
WITCO CHEMICAL CORPORATION
RECORD OF DECISION
SITE NAME AND LOCATION

Witco Chemical Corporation Site
Oakland, Bergen County, New Jersey

STATEMENT OF BASIS AND PURPOSE

This decision document presents the selected remedial action for the Witco Chemical Corporation Site, which was chosen in accordance with the requirements of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended (CERCLA), and to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). This decision document explains the factual and legal basis for selecting the remedy for this Site.

The New Jersey Department of Environmental Protection and Energy concurs with the selected remedy. The information supporting this decision is contained in the administrative record for this Site.

DESCRIPTION OF THE SELECTED REMEDY: NO ACTION

The U.S. Environmental Protection Agency (EPA) has determined that no further remedial action is necessary at the Witco Chemical Corporation Site. The removal of contaminated soil and sludge, undertaken in 1987 and 1988, appears to have been effective in remediating the principal threats associated with the Site. This determination is based on the results of the remedial investigation, which demonstrated that there are no significant concentrations of hazardous substances remaining at the Site. Furthermore, based on a site specific risk assessment, the current and future risks posed by the Site are within EPA's acceptable risk range.

Upon completion of the remedial investigation and risk assessment, it became evident that no further remedial action was required. Accordingly, an evaluation of remedial alternatives, as described by CERCLA, was not appropriate. However, because sporadic ground water contamination has been detected, a limited ground water monitoring program will be implemented to ensure that this no remedial action decision continues to be protective of human health and the environment.

DECLARATION STATEMENT

In accordance with CERCLA and the NCP, EPA has determined that no further action is necessary to ensure protection of human health and the environment at the Witco Chemical Corporation Site. Therefore, the Site now qualifies for inclusion in the "Sites Awaiting Deletion" subcategory of the "Construction Completion" category of the National Priorities List. Because this site does not contain hazardous substances above health-based levels, the five year review will not apply to this decision. RECORD OF DECISION

Witco Chemical Corporation Superfund Site
Oakland, Bergen County, New Jersey

United States Environmental Protection Agency
Region II
New York, New York
September 1992

RECORD OF DECISION
DECISION SUMMARY

Witco Chemical Corporation Superfund Site
Oakland, Bergen County, New Jersey

United States Environmental Protection Agency
Region II
New York, New York
September, 1992

TABLE OF CONTENTS

SITE LOCATION AND DESCRIPTION

SITE HISTORY AND ENFORCEMENT ACTIVITIES

HIGHLIGHTS OF COMMUNITY PARTICIPATION

SCOPE AND ROLE OF RESPONSE ACTION

SUMMARY OF SITE CHARACTERISTICS

SUMMARY OF SITE RISKS

DESCRIPTION OF THE "NO ACTION" REMEDY

STATE ACCEPTANCE

COMMUNITY ACCEPTANCE

EXPLANATION OF SIGNIFICANT CHANGES

ATTACHMENTS

APPENDIX I. FIGURES

APPENDIX II. TABLES

APPENDIX III. ADMINISTRATIVE RECORD INDEX

APPENDIX IV. STATE LETTER OF CONCURRENCE

APPENDIX V. RESPONSIVENESS SUMMARY

DECISION SUMMARY

WITCO CHEMICAL CORPORATION SITE
SITE LOCATION AND DESCRIPTION

The Witco Chemical Corporation Site (the Site) is located in the McBride Industrial Park, Oakland, New Jersey, in western Bergen County (Figure 1). The 9-acre site is bounded to the southeast by the Borough of Franklin Lakes, on the northwest by Bauer Drive, on the southwest by Hoppers Lake and the northeast by a vegetated lot (Figure 2). Two buildings exist on the Site: a research laboratory, and a small storage shed in the east corner.

The Borough of Oakland has a population of approximately 13,000 people. With the exception of one residential well, the area downgradient from the Site is supplied by a municipal water supply system, which consists of six active supply wells.

SITE HISTORY AND ENFORCEMENT ACTIVITIES

Witco Chemical Corporation (Witco) has owned and operated a technical research facility for the development of specialty chemicals at this location from 1966 through the present. From 1966 through 1984, the company neutralized laboratory waste water in a 2,000 gallon underground acid neutralizing tank, and then discharged it to a series of underground seepage pits.

On March 10, 1982, representatives of the New Jersey Department of Environmental Protection and Energy's (NJDEPE's) Division of Water Resources performed an inspection at the facility to review operations and waste water management practices for compliance with the New Jersey Water Pollution Control Act.

On April 2, 1982, NJDEPE issued a directive requiring that Witco take measures to cease the unpermitted discharge of industrial waste waters to ground water at the Site. On July 16, 1982, NJDEPE further directed Witco to submit a plan for the elimination of the discharge of industrial waste waters into ground water and to implement a hydrogeological study to investigate possible soil and ground water contamination. On April 14, 1982 and November 18, 1982, NJDEPE collected seepage pit, soil and ground-water samples at the facility. Compounds detected include petroleum hydrocarbons, chloroform, toluene, carbon tetrachloride, chlorobenzene, benzene, xylene and ethylbenzene.

In response to NJDEPE's directive, Witco initiated a hydrogeological investigation in November 1982 which included the installation and sampling of four ground water monitoring wells. In addition, three soil borings and two sludge samples from the seepage pit system were collected and analyzed. The analyses revealed that the ground water, soil and sludge were contaminated with petroleum hydrocarbons and various organic compounds including toluene, carbon tetrachloride, chloroform, xylene, benzene and chlorobenzene.

In February 1984, Witco replaced its underground seepage pit system with a 6,000 gallon capacity fiberglass tank with associated line connections, pumps and level gauges. This tank is used for the accumulation of laboratory waste waters prior to off-site disposal. The system has been in operation at the facility from February 1984 through the present.

On August 28, 1985, EPA performed a Site Investigation at the facility to evaluate potential contamination due to the previous operation of the underground seepage pit system. Ground water, soil and surface water were sampled and analyzed. Compounds detected during the Site Investigation include 2-butanone, dieldrin, 4,4'-DDE, 4,4'-DDT and benzo(a)pyrene.

On November 30, 1987, Witco initiated remedial activities at the Site including excavation and stockpiling of soils, removal of sludge from the six seepage tanks, and removal and disposal of the seepage tanks. These activities were completed in January 1988. Soils that were shown by Witco's analyses to contain greater than 100 parts per million of petroleum hydrocarbons were removed and disposed of off site. Witco reported that approximately 720 cubic yards of soil and other debris, and fourteen 55-gallon drums of sludge were disposed of off site. Ground-water samples from monitoring wells at the facility were collected and analyzed by Witco on five occasions from February 1987 to June 1988 as part of a voluntary monitoring program. The removal and disposal of materials from the Site and the collection and analyses of samples were conducted voluntarily by Witco and were not subject to oversight or verification by NJDEPE or the Environmental Protection Agency.

(EPA).

The Site was proposed for inclusion on the Superfund National Priorities List (NPL) in June 1988. In September 1989, it was formally placed on the NPL.

In June 1989, EPA notified Witco of its potential Superfund liability with respect to the Site. EPA offered Witco the opportunity to conduct and finance the Remedial Investigation and Feasibility Study (RI/FS) for the Site and Witco agreed. Witco and EPA entered into an Administrative Order on Consent (Order) which provided for Witco's performance of the RI/FS with oversight by EPA. The Order became effective on August 29, 1989 and the Remedial Investigation field work was initiated in August of 1990. The RI was completed in the late Spring of 1992.

HIGHLIGHTS OF COMMUNITY PARTICIPATION

In accordance with the public participation requirements set forth in Sections 113 and 117 of the Comprehensive Environmental Response, Compensation and Liability Act, as amended (CERCLA), the following activities were conducted. The Remedial Investigation Report, the Risk Assessment, the Proposed Plan and other documents, which comprise the Administrative Record for the Witco Site, were released to the public for comment on June 28, 1992. These documents were made available to the public at the Superfund Record Room at EPA's Region II offices in New York City and the Oakland Public Library in Oakland, New Jersey. On June 28, 1992, EPA published a notice in the Bergen Record which contained information relevant to the public comment period for the Site, including the duration of the public comment period, date and location of the public meeting, and the availability of the administrative record. The public comment period began on June 28, 1992, and ended on July 28, 1992. In addition, a public meeting was held on July 14, 1992, where representatives from EPA and NJDEPE gave a presentation and were available to answer any questions regarding the Remedial Investigation and the proposed no action remedy. Responses to the significant comments received during the public comment period are included in the Responsiveness Summary, which is part of this Record of Decision.

SCOPE AND ROLE OF RESPONSE ACTION

Based on EPA's risk assessment, the risks posed by contaminants associated with the Site are within EPA's acceptable risk range. Consequently, there is no need to implement any remedial action at the Site. Monitoring of the Oakland Public Water Supply System is conducted by the Borough twice a month. This monitoring has not revealed any evidence of site-related contaminants. Although EPA does not believe it is likely that site-related contamination could impact downgradient wells, the Agency will monitor a private well downgradient of the Site (see description of "No Action" remedy). This well is located between the Site and Oakland Supply Well #5; therefore, the monitoring program will not only ensure that this residential well has not been impacted, but will also provide an early warning for the public water supply, should any past releases of contamination be migrating toward Well #5.

SUMMARY OF SITE CHARACTERISTICS

Witco contracted with Roy F. Weston, Inc. (Weston) to conduct an investigation to characterize the geology, ground water hydrology, and the chemical quality of the soil and ground water at the Site. The investigation included the installation of additional monitoring wells and piezometers, drilling of soil borings, collection of soil samples, and four rounds of groundwater samples. All samples were analyzed for volatile organic compounds, semivolatile organic compounds, inorganic compounds, base -neutral and acid extractable organic compounds, pesticides and polychlorinated biphenyls (PCBs). The analytical results indicated no significant levels of site-related contaminants in Site soils or surface water, and although there were sporadic detections of contaminants in Site ground water, no discernible contaminant plume was found. The results of the investigation are summarized as follows.

The Site is located on a plateau composed of approximately 230 feet of glacial sediments on top of bedrock. The sediments contain two aquifer units separated by a relatively impermeable silt and clay unit (Figure 3). The ground water can be found at approximately 25 feet below ground surface throughout most of the Site. The direction of ground-water flow varies from approximately north to northwest in the shallow aquifer (Figure 4)

and generally flows northwest in the deeper aquifer (Figure 5).

Four rounds of ground-water samples were collected from the ten onsite monitoring wells. Analyses of the data indicated that the majority of the compounds detected were determined to be representative of natural background conditions, upgradient conditions not related to the Witco Site, or were present at concentrations below Federal and State drinking water standards (Tables 1A through 1D).

Eight compounds were detected at levels which exceeded Federal and/or State standards and did not appear consistent with background conditions. These eight compounds consisted of one semi-volatile compound (bis(2-ethylhexyl)phthalate), and seven inorganic compounds (antimony, chromium, iron, manganese, nickel, sodium, thallium,).

Bis(2-ethylhexyl)phthalate was detected in six out of 31 downgradient samples in the upper aquifer, at concentrations ranging from 1 part per billion (ppb) to 120 ppb. The proposed drinking water standards or maximum contaminant levels (MCLs) for bis(2-ethylhexyl)phthalate are 30 ppb (Federal) and 4 ppb (New Jersey). Although it could not be conclusively determined that bis(2-ethylhexyl)phthalate was representative of background water quality, it was detected in two of the eight background samples (collected from the two monitoring wells at the upgradient edge of the Witco property). In addition, it was only detected at concentrations above proposed Federal and/or State drinking water standards in three out of 31 site-related ground-water samples.

Of the seven inorganics detected in the ground water above Federal and/or State standards, three compounds (antimony, chromium, nickel) were reduced to levels below the standards by filtering.

Antimony was detected in two out of 32 downgradient samples, at concentrations of 21.4 ppb and 37.2 ppb. The MCLs for antimony are 6 ppb (Federal) and 20 ppb (New Jersey proposed). Sample filtering was conducted during the fourth round of sampling. This reduced the antimony from 37.2 ppb to below the method detection limit.

Chromium was detected in 19 of 32 downgradient samples at concentrations ranging from 4.1 ppb. to 985 ppb. The MCLs for chromium are 100 ppb (Federal) and 50 ppb (New Jersey). When sample filtering was conducted during the fourth round of sampling, chromium was reduced from concentrations ranging from 15.3 ppb to 985 ppb, to below the method detection limit. Chromium was also found in four of eight background samples.

Nickel was detected in 23 of 32 downgradient samples at concentrations ranging from 9.3 ppb to 146 ppb. The MCLs for nickel are 100 ppb (Federal) and 100 ppb (New Jersey proposed). When sample filtering was conducted during the fourth round of sampling, nickel was reduced from concentrations ranging from 12.8 ppb to 146 ppb, to below the method detection limit or 82.6 ppb, in one case.

The elimination or substantial reduction in the concentrations of these contaminants by filtering suggests that these contaminants are attached to the sediment present in the ground water, and therefore, may not be representative of the water that would likely reach the tap.

Thallium was detected twice during the first round of sampling, at 7 ppb and 13 ppb, and not detected in the last three rounds. The MCLs are 2 ppb (Federal) and 10 ppb (New Jersey proposed). However, thallium was also detected in the field blank for that round at a 4.1 ppb. Contamination in the field blank indicates that the thallium contamination was introduced into the sample during the sampling and analyses process and is likely unrelated to the Site.

Concentrations for the remaining three compounds (iron, manganese, sodium) remained elevated after filtering. However, these compounds exceeded secondary standards only, which are established for aesthetic purposes and do not pose a health risk. Iron was detected at concentrations ranging from 54.7 ppb to 67,500 ppb; the secondary MCL for iron is 300 ppb. Manganese was detected at concentrations ranging from 2.9 ppb to 1,900 ppb; the secondary MCL for manganese is 50 ppb. Sodium was detected at concentrations ranging from 9,610 ppb to 288,000 ppb; the secondary MCL for sodium is 50,000 ppb.

Surface and subsurface soil samples were taken in the area of the former seepage pits and from the monitoring

wells during drilling. The contaminants detected included antimony, arsenic, beryllium, and iron. A summary of soil sample results can be found in Tables 1E through 1G. In the absence of promulgated Federal or State standards for soils, the concentrations of chemicals detected were evaluated in a site-specific Risk Assessment. As discussed below under "Summary of Site Risks", no significant current or future risk exists related to the chemicals detected in the soils on the Site.

One surface water sample was taken from Hoppers Lake for analysis. None of the compounds detected in that sample exceeded Federal or State standards (Table 1H).

SUMMARY OF SITE RISKS

EPA conducted a baseline Risk Assessment to evaluate the potential risks to human health and the environment associated with the Witco Chemical Corporation Site. The Risk Assessment focused on contaminants in the ground water, surface water, surface soil and subsurface soil which are likely to pose significant risks to human health and the environment. The summary of the contaminants of concern (COC) in sampled matrices is listed in Table 2.

EPA's Risk Assessment identified several potential exposure pathways by which the public may be exposed to contaminant releases at the Site under current and future land-use conditions. Ground water, surface water, surface soil and subsurface soil exposures were assessed for both present and future land-use scenarios. The baseline Risk Assessment then evaluated the health effects which could result from current and future exposure to contamination as a result of ingestion of ground water and incidental ingestion of surface and subsurface soils. Although the Site is located in an industrial development, residential land use was considered for future exposure scenarios as a conservative assumption. Receptor populations considered for the Risk Assessment included the following: resident, on-site worker, excavation worker, utility worker, trespasser and recreational user.

Seven exposure pathways were chosen as pathways of maximum potential exposure and evaluated for both carcinogenic and non-carcinogenic risks. The exposure pathways considered under current and future uses are listed in Table 3. The reasonable maximum exposure was evaluated.

Under current EPA guidelines, the likelihood of carcinogenic (cancer causing) and non-carcinogenic effects due to exposure to site chemicals are considered separately. It was assumed that the toxic effects of the site-related chemicals would be additive. Thus, carcinogenic and non-carcinogenic risks associated with exposures to individual compounds of concern were summed to indicate the potential risks associated with mixtures of potential carcinogens and non-carcinogens, respectively.

Non-carcinogenic risks were assessed using a hazard index (HI) approach, based on a comparison of expected contaminant intakes and safe levels of intake (Reference Doses). Reference doses (RfDs) have been developed by EPA for indicating the potential for adverse health effects. RfDs, which are expressed in units of milligrams per kilogram per day (mg/kg-day), are estimates of daily exposure levels for humans which are thought to be safe over a lifetime (including sensitive individuals). Estimated intakes of chemicals from environmental media (e.g., the amount of a chemical ingested from contaminated drinking water) are compared with the RfD to derive the hazard quotient for the contaminant in the particular medium. The hazard index is obtained by adding the hazard quotients for all compounds across all media that impact a particular receptor population. A hazard index greater than 1.0 indicates that the potential exists for non-carcinogenic health effects to occur as a result of site-related exposures. The HI provides a useful reference point for gauging the potential significance of multiple contaminant exposures within a single medium or across media. The reference doses for the compounds of concern at the Site are presented in Table 4. A summary of the non-carcinogenic risks associated with these chemicals across various exposure pathways is found in Table 5.

As shown on Table 5, only two use scenarios exceeded EPA's target level of 1.0 (future residential ingestion of ground water from the deep aquifer and future residential ingestion of surface soil). Although the Hazard Index for a future resident drinking from the deep aquifer is above 1.0, this is a sum composed mainly of the hazard quotients for iron and antimony, which are likely to be attached to the sediments in the water, and therefore, may not be representative of the water that would likely reach the tap. In addition, the antimony value is based on only one detection in four rounds of sampling. Furthermore, the Hazard Index assumes that

the contaminants of concern have an additive effect on the human body, when in fact, antimony and iron have different critical effects on the human body and, therefore, should not be considered additive.

The Hazard Index for a future resident ingesting surface soil, although just at the target level, is a sum composed mainly of the hazard quotients for iron and arsenic, which were found at concentrations well within the natural background range for soils of the Eastern United States. In addition, iron and arsenic have different critical effects on the human body and, therefore, should not be considered to have an additive effect.

Furthermore, both of the above Hazard Indices are also based on the conservative assumption that there will be future residential use of the Site. No adverse health impacts would be expected based on the current industrial use of the Site.

Potential carcinogenic risks were evaluated using the cancer slope factors developed by EPA for the contaminants of concern. Cancer slope factors (SFs) have been developed by EPA's Carcinogenic Risk Assessment Verification Endeavor for estimating excess lifetime cancer risks associated with exposure to potentially carcinogenic chemicals. SFs, which are expressed in units of (mg/kg-day)⁻¹, are multiplied by the estimated intake of a potential carcinogen, in mg/kg-day, to generate an upper-bound estimate of the excess lifetime cancer risk associated with exposure to the compound at that intake level. The term "upper bound" reflects the conservative estimate of the risks calculated from the SF. Use of this approach makes the underestimation of the risk highly unlikely. The SFs for the compounds of concern are presented in Table 4.

For known or suspected carcinogens, EPA considers excess upper bound individual lifetime cancer risks of between 10⁻⁴ to 10⁻⁶ to be acceptable. This level indicates that an individual has not greater than a one in ten thousand to one in a million chance of developing cancer as a result of site-related exposure to a carcinogen over a 70-year period under specific exposure conditions at the Site.

The pathway with the highest upper bound cancer risk at the Witco Site is residential ingestion of ground water from the upper aquifer, which was calculated to be 6.7 X 10⁻⁵ (6.7 in a hundred thousand) (Table 6). As is evident from Table 6, carcinogenic risk associated with each of the pathways falls within or below the acceptable risk range of 10⁻⁴ to 10⁻⁶. The carcinogenic risk for the Site is almost primarily attributable to the occurrence of arsenic and bis(2-ethylhexyl) phthalate.

The ecological risk assessment first evaluated the site-related contaminants that could potentially pose risks to the associated ecological (non-human) receptors. Of potential concern in the Site's surface soils were iron and arsenic.

The ecological risk assessment then considered the effects of the above chemicals on the respective receptors that interplay with the surface soils. The risk of exposure to chemicals in the surface soils (iron and arsenic) would be to the several avian species observed in the vicinity of the Site (crows, swallows, sparrows, starlings, and Canada geese) and to the Eastern Cottontail rabbit, the only mammalian species observed on the Site, although others might be expected to occur.

The route of exposure for the potential uptake of these metals to both the bird species and the Eastern cottontail rabbit would be via their diet, which is largely not supplied by the Site proper. A large portion of the 9-acre site is a building and a parking lot; therefore, the Site does not provide high-quality habitat for the species observed. Additionally, the Site has only a small wooded area which, in conjunction with the fact that home ranges for both birds and rabbits are significantly larger than the Site itself, would act to greatly minimize the occurrence of exposure to these metals. In addition, the Canada goose and other birds are migratory species, and being absent from the region during several months of the year further reduces the likelihood of exposure to the metals. Although sampling was performed in Hopper's Pond, the RI later revealed that there are no significant pathways for migration of contaminants from the Site to the pond. Furthermore, the samples from the pond showed no significant levels of contaminants.

Based on the ecological risk assessment performed for the Witco Site, site-related contaminants should have no significant impact on the plant and animal species on and around the Site.

Uncertainties

The procedures and inputs used to assess risks in this evaluation, as in all such assessments, are subject to a wide variety of uncertainties. In general, the main sources of uncertainty include:

- ! environmental chemistry sampling and analysis
- ! environmental parameter measurement
- ! fate and transport modeling
- ! exposure parameter estimation
- ! toxicological data.

Uncertainty in environmental sampling arises in part from the potentially uneven distribution of chemicals in the media sampled. Consequently, there is significant uncertainty as to the actual levels present.

Environmental chemistry analysis error can stem from several sources including the errors inherent in the analytical methods and characteristics of the matrix being sampled.

Uncertainties in the exposure assessment are related to estimates of how often an individual would actually come in contact with the chemicals of concern, the period of time over which such exposure would occur, and in the models used to estimate the concentrations of the chemicals of concern at the point of exposure.

Uncertainties in toxicological data occur in extrapolating both from animals to humans and from high to low doses of exposure, as well as from the difficulties in assessing the toxicity of a mixture of chemicals. These uncertainties are addressed by making conservative assumptions concerning risk and exposure parameters throughout the assessment. As a result, the Risk Assessment provides upper bound estimates of the risks to populations near the Site, and is highly unlikely to underestimate actual risks related to the Site.

More specific information concerning public health risks, including a quantitative evaluation of the degree of risk associated with various exposure pathways, is presented in the Risk Assessment Report.

DESCRIPTION OF THE "NO ACTION" REMEDY

Based on the results of the Remedial Investigation, it appears that the removal of the seepage pits and surrounding soil, undertaken by Witco in 1987, effectively remediated the contamination at the Witco Site. Therefore, EPA has determined that no further remedial action is necessary at the Site. However, because there was some evidence of past ground-water contamination and sporadic contamination was detected during the Remedial Investigation, a limited ground-water monitoring program will be implemented. EPA will monitor the residential well located at 18 Bailey Avenue, once a year for a period not less than five years. This well was selected because it is the only residential well downgradient of the Site which is located between the Site and Oakland Public Supply Well #5. In the unlikely event that site-related contamination has migrated off the Site, the monitoring program will not only ensure that this residential well has not been impacted, but will provide an early warning for the public water supply, should any such contamination migrate toward Oakland Public Supply Well #5.

STATE ACCEPTANCE

The State of New Jersey concurs with the No Action remedy. The State's letter of concurrence is attached to this Record of Decision as Appendix IV.

COMMUNITY ACCEPTANCE

A summary of the comments received during the public comment period is provided in the Responsiveness Summary, which is attached to this Record of Decision as Appendix V.

EXPLANATION OF SIGNIFICANT CHANGES

There are no significant changes from the recommended alternative in the Proposed Plan. However, EPA will include monitoring of the residential well as discussed above.

ATTACHMENTS

APPENDIX I.
FIGURES

<yFigure>

APPENDIX II.
TABLES

APPENDIX IV.
STATE LETTER OF CONCURRENCE

State of New Jersey
Department of Environmental Protection and Energy
Office of the Commissioner
CN 402
Trenton, NJ 08625-0402
Tel. # 609-292-2885
Fax. # 609-984-3962

Scott A. Weiner
Commissioner

SEP 21 1992

Mr. Constantine Sidamon-Eristoff
USEPA Region II
26 Federal Plaza
New York, NY 10278

Dear Mr. Sidamon-Eristoff:

Re: Record of Decision (ROD)
Witco Chemical Corporation Site
Oakland Township, Bergen County

The NJDEPE has reviewed the Record of Decision (ROD) dated August 21, 1992, for the Witco Chemical Corporation Site located in Oakland Township and we concur with the proposed "No Further Action" alternative.

The Remedial Investigation and subsequent Risk Assessment have provided significant documentation of this site and the protectiveness of the previously performed remedial actions in regard to human health and the environment.

Sincerely,

Scott A. Weiner
Commissioner